

WHAT IS CLAIMED IS:

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1. An information storage device
comprising:

a tracking actuator; and

10 a deceleration control unit which supplies
a deceleration pulse to the tracking actuator a
plurality of times between a seek control operation
for seeking a target track and a tracking control
operation for scanning the target track with a beam.

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2. The information storage device as
claimed in claim 1, further comprising:

20 a seek control signal generating unit
which generates a seek control signal for
controlling the tracking actuator so that the beam
moves at a predetermined velocity;

a low frequency element extracting unit
25 which extracts a low frequency element from the seek
control signal generated by the seek control
generating unit; and

an adding unit which adds the low
frequency element extracted from the seek control
30 signal by the low frequency element extracting unit
to the deceleration pulse.

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3. The information storage device as
claimed in claim 1, further comprising a

deceleration pulse generating unit which detects the movement velocity of the beam, and determines an amplitude of the deceleration pulse to be supplied to the tracking actuator as a linear function of the
5 detected movement velocity.

10 4. The information storage device as claimed in claim 3, wherein the deceleration pulse generating unit comprises a multiplying unit which multiplies the detected movement velocity by a
15 predetermined constant.

20 5. The information storage device as claimed in claim 4, wherein the deceleration pulse generating unit further comprises an adding unit which adds a predetermined offset value to the detected movement velocity, and supplies the
25 addition result to the multiplying unit.

30 6. The information storage device as claimed in claim 4, wherein the deceleration pulse generating unit outputs the deceleration pulse having a predetermined constant pulse width.

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7. The information storage device as

claimed in claim 1, wherein the tracking actuator performs both the seek control operation and the tracking control operation.

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8. An information storage device comprising:

- 10 a tracking actuator;
 a movement velocity detecting unit which detects a movement velocity of a beam between a seek control operation for seeking a target track and a tracking control operation for scanning the target
15 track with the beam; and
 a deceleration pulse generating unit which determines an amplitude of a deceleration pulse to be supplied to the tracking actuator as a linear function of the movement velocity detected by the
20 movement velocity detecting unit.

25 9. The information storage device as claimed in claim 8, wherein the deceleration pulse generating unit comprises a multiplying unit which multiplies the detected movement velocity by a predetermined constant.

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 10. The information storage device as
35 claimed in claim 9, wherein the deceleration pulse generating unit further comprises an adding unit which adds a predetermined offset value to the

detected movement velocity, and supplies the addition result to the multiplying unit.

11. The information storage device as claimed in claim 8, wherein the deceleration pulse
5 generating unit outputs the deceleration pulse having a predetermined constant pulse width.